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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,917	01/30/2004	Raghu M. Ramajois	8200.809	3981
7590 Liniak, Berenato & White Ste. 240 6550 Rock Spring Drive Bethesda, MD 20817			EXAMINER PILKINGTON, JAMES	
			ART UNIT 3682	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/21/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/766,917

Applicant(s)

RAMAJOIS ET AL.

Examiner

James Pilkington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/30/04 & 8/9/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "one hole through said sidewall and includes two holes" (clm 4, 14 and 18) must be shown or the feature(s) canceled from the claim(s). The examiner is reading the clm to say that the said at least one hole now has two other holes present inside of it.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 11 is objected to because of the following informalities:

- In line 2, "rube" should be --tube--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6, 7, 9, 16, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re clms 6, 9, and 16, the phrase "substantially closing said casing" renders the claim indefinite. How much closure is required to be substantially closed? If the device is not closed all the way, how does it function? Wouldn't some of the oil leak out if it is not closed?

Re clm 7, the phrase "substantially within said housing" renders the claim indefinite. How far into the housing does the casing have to be to be substantially within the housing? Does it have to be in contact with the fluid or could it be above the fluid?

Claims 19 and 20 recites the limitation "said opening " in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Azuma et al, USP 4,595,118.

Re clm 21, Azuma discloses a vent assembly that comprises a top portion (22) a skirt portion (the part of the vent tube which extends through the housing) extending into the housing (20) and having a continuous side wall extending circumferentially at least 180 degrees (2A;Fig 6), a vent opening passing through said skirt and the opening being adjacent the top portion and opposite the side wall (Fig. 2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 5, 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukunaga, USP 4,351,203 in view of Azuma et al, USP 4,595,118.

Re clm 1, Fukunaga discloses a similar device having a hollow casing (5) including continuous side wall having at least one hole (55) there through, the hollow casing having an opening (51) formed in a lower portion and a vent tube (7).

Fukunaga does not disclose said vent tube extending within said hollow casing so as to form a cavity between an inner peripheral surface of said casing and an outer peripheral surface of said vent.

Azuma teaches extending the vent tube (32) within said hollow casing (20) forming a cavity between the hollow casing (20) and the vent tube (32) and said vent tube (32) having a first open end disposed within said hollow casing (20) and a second end extending outside said casing in communication with an external environment (Fig. 2) for the purpose of providing an air-breather device which is capable of preventing any external leakage even when immersed when the end is immersed in fluid (col. 1 lines 51-54).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Fukunaga and provide a vent tube extending within said hollow casing so as to form a cavity between an inner peripheral surface of said casing and an outer peripheral surface of said vent, as taught by Azuma.

Re clm 2, Azuma teaches that both the vent tube (32) and the hollow casing (20) are substantially cylindrical (Figs. 2 and 3) and the cavity created between the hollow casing (20) and the vent tube (32) is substantially annular.

Re clm 5, Fukunaga discloses that the second end of the vent tube (7) is formed with an external retention surface (72).

Re clm 6, Fukunaga in view of Azuma discloses that the hollow casing (5) includes a top end wall (71, Fukunaga) substantially closing said hollow casing, said vent tube (7) being connected and extending through said top end wall (Azuma Figure 2).

Re clm 19, Fukunaga discloses that the hollow casing includes a bottom wall (where casing bends inward) substantially closing said hollow casing, an opening (51) defined by a hole extending through the bottom wall.

9. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukunaga, USP 4,351,203, in view of Azuma et al, USP 4,595,118, and further in view of Rodgers et al, USP 5,724,864.

Re clms 3 and 11, Fukunaga in view of Azuma discloses all of the claimed subject matter as described above, and further discloses that the at least one hole (55) is located on a longitudinal first side portion of said casing adjacent said long side of said vent tube.

Fukunaga and Azuma do not disclose the vent tube has a beveled end/non-truncated such that and an oblique opening is formed in the first end of the vent tube, the vent tube having a long side and a short side.

Rodgers et al teach adding a bevel (116) to the end of the vent shaft (114) those creating an oblique opening and a vent tube having a long side and a short side (Figure 2) for the purpose of increasing the surface opening of the passageway (col. 4 lines 26-27).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Fukunaga and Azuma and provide a bevel on the end of the vent tube, as taught by Rodgers, to increase the surface opening of the passageway. The resulting device, Fukunaga in view of Azuma further in view of

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Rodgers, discloses a hole through the sidewall of the casing being located on a longitudinal first side portion of the casing adjacent to the long side of the vent tube.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukunaga, USP 4,351,203, in view of Azuma et al, USP 4,595,118, in further view of Rodgers et al, USP 5,724,864, and further in view of Terwoerds et al, USP 3,422,982.

Fukunaga discloses the use of multiple holes (55, 55') to insure that at least one opening is always open to the interior of the gear housing and one hole is always located on the downstream side of lubricant flow (col. 2 line 51-59).

Fukunaga does not disclose spacing the holes apart longitudinally.

Terwoerds et al teach spreading holes (24) apart longitudinally or in any geometric relationship (col 3 lines 26-32) for the purpose of separating oil from the air being vented out (col 4 lines 43-51).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Fukunaga and provide holes that are longitudinally separated, as taught by Terwoerds et al, to provide a means of separating the liquid from the escaping air.

11. Claims 7-10, 12, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al, USP 4,595,118 in view of Fukunaga, USP 4,351,203.

Re clm 7, Azuma discloses a vent assembly comprising a hollow casing (20) secured in a housing (12), said casing including a continuous side wall (outside of

casing) that terminates at a lower portion (at 24A) having an opening (24A), and a vent tube (32) extending within said hollow casing (20) with a first end disposed in the casing and a second end communication with the external environment (see Figure 2)

Azuma does not disclose that the continuous side wall has at least one hole.

Fukunaga teach a continuous side wall (5) having a hole (55) for the purpose of creating a ventilation effect so that the pressure between the inside of the housing and the outside environment is maintained (C3/L2-17).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Azuma and provide the continuous side wall with a hole, as taught by Fukunaga, for the purpose of creating a ventilation effect so that the pressure between the inside of the housing and the outside environment is maintained.

Re clm 8, Azuma discloses that a substantial portion of the casing (20) is disposed in a recessed cavity (cavity with fluid, see Figure 2).

Re clm 9, Azuma discloses that the hollow casing (20) includes a substantially flat top end wall (22) substantially closing said casing (20), said top end wall having a peripheral surface extending beyond said side wall (wall of 20) substantially about a periphery of said vent tube (32).

Re clm 10, Azuma discloses that the peripheral surface (surface of 22) engages an external surface of said housing (12), said vent tube (32) being connected to and extending through said top wall (22) and a bore (hole for vent assembly) formed in said external surface of the housing (12).

Re clm 12, Azuma discloses that both the vent tube (32) and the hollow casing (20) are substantially cylindrical (Figs. 2 and 3) and the cavity created between the hollow casing (20) and the vent tube (32) is substantially annular

Re clm 16, Azuma discloses that the hollow casing (20) includes a top end wall (22) substantially closing said hollow casing, said vent tube (32) being connected and extending through said top end wall (Figure 2).

Re clm 20, Azuma discloses that the hollow casing (20) includes a bottom wall (where casing bends inward) substantially closing said hollow casing (20), an opening (24A) defined by a hole extending through said bottom wall.

12. Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al, USP 4,595,118, Fukunaga, USP 4,351,203, in view of Fukunaga, USP 4,351,203, and further in view of Rodgers et al, USP 5,724,864.

Re clm 13 and 17, Azuma in view of Fukunaga disclose all of the claimed subject matter as described above, and further discloses that the at least one hole (55) is located on a longitudinal first side portion of said casing adjacent said long side of said vent tube.

Azuma and Fukunaga et al do not disclose the vent tube has a beveled end/non-truncated such that and an oblique opening is formed in the first end of the vent tube, the vent tube having a long side and a short side.

Rodgers et al teach adding a bevel (116) to the end of the vent shaft (114) those creating an oblique opening and a vent tube having a long side and a short side (Figure

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2) for the purpose of increasing the surface opening of the passageway (col. 4 lines 26-27).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Azuma and Fukunaga et al and provide a bevel on the end of the vent tube, as taught by Rodgers, to increase the surface opening of the passageway. The resulting device, Azuma in view of Fukunaga further in view of Rodgers, discloses a hole through the sidewall of the casing being located on a longitudinal first side portion of the casing adjacent to the long side of the vent tube.

13. Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al, USP 4,595,118, in view of Fukunaga, USP 4,351,203, in further view of Rodgers et al, USP 5,724,864, and further in view of Terwoerds et al, USP 3,422,982.

Azuma in view of Fukunaga and Rodgers discloses all the claimed subject matter as disclosed above.

Azuma in view of Fukunaga and Rodgers does not disclose having two holes and the holes being spaced apart longitudinally.

Terwoerds et al teach spreading holes (24) apart longitudinally or in any geometric relationship (col 3 lines 26-32) for the purpose of separating oil from the air being vented out (col 4 lines 43-51).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Azuma in view of Fukunaga and Rodgers and

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provide holes that are longitudinally separated, as taught by Terwoerds et al, to provide a means of separating the liquid from the escaping air.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al, USP 4,595,118 in view of Fukunaga, USP 4,351,203.

Azuma in view of Fukunaga discloses all the claimed subject matter as applied to claim 7.

Azuma in view of Fukunaga, as applied to claim 7, does not disclose the second end of the vent tube being formed with an external retention surface.

Fukunaga teach the a vent tube (7) having a second end with an external retention surface (72) for the purpose of providing a securement means for the cap of the vent tube (C2/L38-48).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Azuma in view of Fukunaga and provide the vent tube with a second end that has an external retention surface, as taught by Fukunaga, for the purpose of providing a securement means for the cap of the vent tube.

15. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al, USP 4,595,118 in view of Rodgers et al, USP 5,724,864.

Re clm 22, Azuma et al, disclose a similar device having a vent tube (32) that is secured to the housing (20), a top portion secured adjacent the housing (22), a skirt portion of the vent tube (32) extending into the housing (20).

Azuma et al do not disclose said vent tube being obliquely formed to have a long side and a short side within the casing.

Rodgers et al teach the vent tube (114) being obliquely formed (Fig. 2) for the purpose of increasing the surface opening of the passageway (col. 4 lines 26-27).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Azuma et al and provide a vent tube with an obliquely formed end, as taught by Rodgers et al, for the purpose of increasing the surface opening of the passageway.

Double Patenting

16. Claims 1-22 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of the claims of copending Application No. 11/139533. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James Pilkington
12-19-2006



RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER